

Harvey Application No. 08/448644

Allowable Claims:

Claims **279, 358, 361, 367, 373, 377, 378, 389, 404** and their dependent claims are considered allowable.

Rejected Claims with Applicable Prior Art:

Independent claims **2, 4, 5, 165, 176, 224, 261-266, 325, and 342** are considered anticipated by Yanagimachi et al. (U.S. 3,936,595).

Independent claims **81, 82, 105, and 114** are considered anticipated by Haselwood et al. (U.S. 4,025,851).

Independent claims **78-80, 83, and 157** are considered unpatentable over Haselwood et al. (U.S. 4,025,851) in view of Yanagimachi et al. (U.S. 3,936,595).

Proposed Amendments to Rejected Independent Claims to Overcome Prior Art:

Regarding claim **2**, *Yanagimachi* teaches a method for controlling the communication of programming signals at a receiver station, where a programming stream is received at a receiver station of Figure 14 that contains a plurality of control codes (embedded signals) as spoken of on column 16, lines 22-40. *Yanagimachi* also teaches where the programming stream signal received at the input terminal 117 of the receiver 103 of Figure 14 is demodulated by a demodulator 118. *Yanagimachi* also teaches where the control codes (embedded signals) are communicated from demodulator 118 to a control code decoder 119 (valve) as shown in Figure 14 and spoken of on column 16, lines 22-27. *Yanagimachi* also teaches where the control code decoder 119 (valve) decodes a received control code to obtain a decoded control code (valve control signal) as spoken of on column 16, lines 25-27. *Yanagimachi* also teaches the control code decoder 119 (valve) that controls the outputting of video and audio from the video frame gate 122 and the audio channel selector 120 (processors) based upon a decoded control code as spoken of on column 16, lines 25-40.

A proposed amendment to this claim would be to add the following limitations of dependent claim **6**:

communicating said at least one valve control signal from said valve to said at least one processor.

While *Yanagimachi* teaches the use of the decoded control codes (valve control signals) to control the outputting of video and audio from the video frame gate 122 and the audio channel selector 120 (processors), and also appears to show some signaling being sent from control code decoder 119 to video frame gate 122 and audio channel selector 120 as shown by the input arrows in the receiver 103 of Figure 14, *Yanagimachi* does not teach where the valve control signals themselves are communicated from the valve to at least one processor.

Regarding claim 4, *Yanagimachi* also applies to this claim as *Yanagimachi* teaches the reception of a programming stream transmission at a signal combining device 112 of transmitter 102 of Figure 14 that contains a plurality of control codes (valve control signals) provided by allocation control device 104 as spoken of on column 14, line 65 – column 15, line 32. *Yanagimachi* also teaches the reception of additional control signaling at allocation control device 104 from signal sources 101 that is used to control the outputting of the programming stream to output terminal 114 for subsequent transmission as spoken of on column 14, line 61 – column 15, line 32.

A proposed amendment to this claim would be to add the following limitations of dependent claim 6:

communicating said at least one valve control signal from said valve to said at least one processor.

Regarding claim 5, *Yanagimachi* also applies to this claim as *Yanagimachi* teaches the reception of a programming stream transmission at a signal combining device 112 of transmitter 102 of Figure 14 that contains a plurality of control codes (valve control signals) provided by allocation control device 104 as spoken of on column 14, line 65 – column 15, line 32. *Yanagimachi* also teaches the storage of the combined programming stream in a memory 130 of transmitter 102 of Figure 14.

A proposed amendment to this claim would be to add the following limitations of dependent claim 6:

communicating said at least one valve control signal from said valve to said at least one processor.

Regarding claim 78, *Haselwood* teaches a broadcast television monitoring system where a composite signal is received by a monitor receiver 24 of Figure 2 that contains a video portion as well as vertical and horizontal synchronization portions (embedded data). *Haselwood* also teaches the generation of interrupt requests (interrupt signals) in response to vertical and horizontal synchronization signals (embedded data) as spoken of on column 6, lines 54-60. *Haselwood* also teaches the synchronization logic circuit 78 (processor) of Figure 5 that controls the interrupt processing and outputting of video data as spoken of on column 6, line 62 – column 7, line 8.

While *Haselwood* teaches the processing of the video and vertical and horizontal synchronization portions of the received signal in a decoder 28 of Figure 2, *Haselwood* does not explicitly teach the demodulation of the received signal.

However, *Yanagimachi* teaches a programming stream reception system in Figure 14 where a demodulator 118 is utilized to demodulate a received composite signal and for forwarding for further processing in the receiver 103.

Haselwood makes use of antennas 20 and 26 for wireless communication as shown in Figures 1 and 2.

At the time of the invention, it would have been obvious to apply demodulation in the system of *Haselwood* as taught in *Yanagimachi* in order to provide a reduction in antenna size through wavelength reduction and frequency modulation.

A proposed amendment to this claim would be to add the following limitations of claim 167:

receiving data to be transmitted;

receiving a first control signal which at said receiver station operates to cause a selected programmable processor to at least one of generate and control the passing of a first portion of at least one of a video and an audio signal;

receiving a second control signal which operates at a transmitter station to communicate at least one of said data and said first control signal to a transmitter;

transmitting one of a broadcast and a cablecast transmission comprising said data and said first control signal;

wherein said first control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor.

Adding these above limitations to claim 78 would indicate specific control signaling at the transmitter in combination with specific control processing at the receiver that is not considered obvious over Haselwood and Yanagimachi.

Regarding claim 79, Haselwood in view of Yanagimachi also applies to this using the same rationale as applied to claim 78 above.

A proposed amendment to this claim would be to add the following limitations of claim 167:

receiving data to be transmitted;

receiving a first control signal which at said receiver station operates to cause a selected programmable processor to at least one of generate and control the passing of a first portion of at least one of a video and an audio signal;

receiving a second control signal which operates at a transmitter station to communicate at least one of said data and said first control signal to a transmitter;

transmitting one of a broadcast and a cablecast transmission comprising said data and said first control signal;

wherein said first control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor.

Regarding claim 80, Haselwood in view of Yanagimachi also applies to this using the same rationale as applied to claim 78 above.

A proposed amendment to this claim would be to add the following limitations of claim 167:

receiving data to be transmitted;

receiving a first control signal which at said receiver station operates to cause a selected programmable processor to at least one of generate and control the passing of a first portion of at least one of a video and an audio signal;

receiving a second control signal which operates at a transmitter station to communicate at least one of said data and said first control signal to a transmitter;

transmitting one of a broadcast and a cablecast transmission comprising said data and said first control signal;

wherein said first control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor.

Regarding claim 81, *Haselwood* also applies to this claim as *Haselwood* teaches the receiving of a mixed signal containing video as well as encoded vertical/horizontal synchronization information (control signal) at network outlet 18 of a transmitter in Figure 1 for subsequent transmission as spoken of on column 3, lines 15-40.

A proposed amendment to this claim would be to add the following limitations similar to limitations in claims 78 and 167:

receiving a second control signal which at said receiver station operates to cause a selected programmable processor to at least one of generate and control the passing of a first portion of at least one of a video and an audio signal;

transmitting one of a broadcast and a cablecast transmission comprising said data and said second control signal;

wherein said second control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor.

receiving said one of a broadcast and cablecast transmission;

detecting said data in said one of a broadcast and cablecast transmission;

generating a processor interrupt signal in response to said data;

communicating said processor interrupt signal to said at least one processor; and causing said at least one processor, in response to said processor interrupt signal, to perform at least one of: generating at least one of a video and audio signal at a specific time, and outputting said at least one of a video and audio signal at a specific time.

Regarding claim 82, *Haselwood* also applies to this claim using the same rationale as applied to claim 81 above.

A proposed amendment to this claim would be to add the following limitations similar to limitations in claims 78 and 167:

receiving a first control signal which at said receiver station operates to cause a selected programmable processor to at least one of generate and control the passing of a first portion of at least one of a video and an audio signal;

receiving a second control signal which operates at a transmitter station to communicate at least one of said data and said first control signal to a transmitter;

transmitting one of a broadcast and a cablecast transmission comprising said data and said first control signal;

wherein said first control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor;

receiving said one of a broadcast and cablecast transmission;

detecting said data in said one of a broadcast and cablecast transmission;

generating a processor interrupt signal in response to said data;

communicating said processor interrupt signal to said at least one processor; and causing said at least one processor, in response to said processor interrupt signal, to perform at least one of: generating at least one of a video and audio signal at a specific time, and outputting said at least one of a video and audio signal at a specific time.

Regarding claim 83, *Haselwood* also applies to this claim as *Haselwood* teaches embedded vertical and horizontal synchronization signals (embedded data) that are inputted to the synchronization logic circuit 78 (processor) of Figure 5. *Haselwood* also teaches where the synchronization logic circuit 78 controls the outputting of data from

data buffer 76 as well as synchronization buffer 80 (input sources) in response to the received vertical and horizontal synchronization signals as spoken of on column 6, lines 62-68. *Haselwood* also teaches the CPUs that wait to receive data input from data buffer 76 as well as synchronization buffer 80 (input sources).

As provided above, *Yanagimachi* further teaches a programming stream reception system in Figure 14 where a demodulator 118 is utilized to demodulate a received composite signal and for forwarding for further processing in the receiver 103.

A proposed amendment to this claim would be to add the following limitations similar to limitations in claims **78** and **167**:

receiving data to be transmitted;

receiving a first control signal which at said receiver station operates to cause a selected programmable processor to at least one of generate and control the passing of a first portion of at least one of a video and an audio signal;

receiving a second control signal which operates at a transmitter station to communicate at least one of said data and said first control signal to a transmitter;

transmitting one of a broadcast and a cablecast transmission comprising said data and said first control signal;

wherein said first control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor;

receiving said one of a broadcast and cablecast transmission;

detecting said data in said one of a broadcast and cablecast transmission;

generating a processor interrupt signal in response to said data;

communicating said processor interrupt signal to said at least one processor; and causing said at least one processor, in response to said processor interrupt signal, to perform at least one of: generating at least one of a video and audio signal at a specific time, and outputting said at least one of a video and audio signal at a specific time.

Regarding claim **105**, *Haselwood* also applies to this claim using the same rationale as applied to claim **83** above.

A proposed amendment to this claim would be to add the following limitations similar to limitations in claims **78** and **167**:

receiving a first control signal which at said receiver station operates to cause a selected programmable processor to at least one of generate and control the passing of a first portion of at least one of a video and an audio signal;

transmitting one of a broadcast and a cablecast transmission comprising said data and said first control signal;

wherein said first control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor;

receiving said one of a broadcast and cablecast transmission;

detecting said data in said one of a broadcast and cablecast transmission;

generating a processor interrupt signal in response to said data;

communicating said processor interrupt signal to said at least one processor; and causing said at least one processor, in response to said processor interrupt signal, to perform at least one of: generating at least one of a video and audio signal at a specific time, and outputting said at least one of a video and audio signal at a specific time.

Regarding claim 114, Haselwood also applies to this claim using the same rationale as applied to claim 83 above.

A proposed amendment to this claim would be to add the following limitations similar to limitations in claims 78 and 167:

receiving a first control signal which at said receiver station operates to cause a selected programmable processor to at least one of generate and control the passing of a first portion of at least one of a video and an audio signal;

receiving a second control signal which operates at a transmitter station to communicate at least one of said data and said first control signal to a transmitter;

transmitting one of a broadcast and a cablecast transmission comprising said data and said first control signal;

wherein said first control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor;

receiving said one of a broadcast and cablecast transmission;

detecting said data in said one of a broadcast and cablecast transmission;

generating a processor interrupt signal in response to said data;

communicating said processor interrupt signal to said at least one processor; and causing said at least one processor, in response to said processor interrupt signal, to perform at least one of: generating at least one of a video and audio signal at a specific time, and outputting said at least one of a video and audio signal at a specific time.

Regarding claim 157, Haselwood in view of Yanagimachi apply to this claim using the same rationale as applied to claim 78 above.

A proposed amendment to this claim would be to add the following limitations of claim 167:

receiving data to be transmitted;

receiving a first control signal which at said receiver station operates to cause a selected programmable processor to at least one of generate and control the passing of a first portion of at least one of a video and an audio signal;

receiving a second control signal which operates at a transmitter station to communicate at least one of said data and said first control signal to a transmitter;

transmitting one of a broadcast and a cablecast transmission comprising said data and said first control signal;

wherein said first control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor.

Regarding claim 165, Yanagimachi also applies to this claim as Yanagimachi teaches the reception of programming data from signal sources 101 of Figure 14.

Yanagimachi also teaches the generation and transmission of a plurality of control codes (first and second control signals) that are utilized at the receiver 103 of Figure 14 to control the outputting of video and audio signals as spoken of on column 16, lines 22-36.

A proposed amendment to this claim would be to add the following limitations similar to limitations in claims 78 and 167:

wherein said first control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor;

receiving said one of a broadcast and cablecast transmission;

detecting said data in said one of a broadcast and cablecast transmission; generating a processor interrupt signal in response to said data; communicating said processor interrupt signal to said at least one processor; and causing said at least one processor, in response to said processor interrupt signal, to perform at least one of: generating at least one of a video and audio signal at a specific time, and outputting said at least one of a video and audio signal at a specific time.

Regarding claim 176, Yanagimachi also applies to this claim using the same rationale applied to claim 165 above.

A proposed amendment to this claim would be to add the following limitations similar to limitations in claims 78 and 167:

receiving a second control signal which operates at a transmitter station to communicate at least one of said data and said first control signal to a transmitter; transmitting one of a broadcast and a cablecast transmission comprising said data and said first control signal; wherein said first control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor; receiving said one of a broadcast and cablecast transmission; detecting said data in said one of a broadcast and cablecast transmission; generating a processor interrupt signal in response to said data; communicating said processor interrupt signal to said at least one processor; and causing said at least one processor, in response to said processor interrupt signal, to perform at least one of: generating at least one of a video and audio signal at a specific time, and outputting said at least one of a video and audio signal at a specific time.

Regarding claim 224, Yanagimachi also applies to this claim using the same rationale applied to claim 165 above.

A proposed amendment to this claim would be to add the following limitations similar to limitations in claims 78 and 167:

receiving a first control signal which at said receiver station operates to cause a selected programmable processor to at least one of generate and control the passing of a first portion of at least one of a video and an audio signal; receiving a second control signal which operates at a transmitter station to communicate at least one of said data and said first control signal to a transmitter; transmitting one of a broadcast and a cablecast transmission comprising said data and said first control signal; wherein said first control signal operates at said receiver station to communicate an interrupt signal to said selected programmable processor; receiving said one of a broadcast and cablecast transmission; detecting said data in said one of a broadcast and cablecast transmission; generating a processor interrupt signal in response to said data; communicating said processor interrupt signal to said at least one processor; and causing said at least one processor, in response to said processor interrupt signal, to perform at least one of: generating at least one of a video and audio signal at a specific time, and outputting said at least one of a video and audio signal at a specific time.

Regarding claim **325**, *Yanagimachi* also applies to this claim using the same rationale applied to claim **165** above.

A proposed amendment to this claim would be to add the following limitations similar to limitations in claims **78** and **167**:

wherein said first control signal operates at said receiver station to communicate an interrupt signal to a selected programmable processor;
receiving said first broadcast or cablecast transmission;
detecting said data in said one of a broadcast and cablecast transmission;
generating a processor interrupt signal in response to said data;
communicating said processor interrupt signal to said at least one processor; and
causing said at least one processor, in response to said processor interrupt signal, to perform at least one of: generating at least one of a video and audio signal at a specific time, and outputting said at least one of a video and audio signal at a specific time.

Regarding claim **342**, *Yanagimachi* also applies to this claim using the same rationale applied to claim **165** above.

A proposed amendment to this claim would be to add the following limitations similar to limitations in claims **78** and **167**:

wherein said first control signal operates at said receiver station to communicate an interrupt signal to a selected programmable processor;
receiving said first broadcast or cablecast transmission;
detecting said data in said one of a broadcast and cablecast transmission;
generating a processor interrupt signal in response to said data;
communicating said processor interrupt signal to said at least one processor; and
causing said at least one processor, in response to said processor interrupt signal, to perform at least one of: generating at least one of a video and audio signal at a specific time, and outputting said at least one of a video and audio signal at a specific time.

Regarding independent claims **261-266**, these claims are significantly broader versions of other independent claims discussed above, so I have been unable to generate specific amendments to propose for these claims, as it appears that significant amendments would need to be made to get these in condition for allowance. The *Yanagimachi* reference is applicable to each of these claims. A suggestion would be to cancel these claims, but we could also potentially work out some amendments for these claims to get them more in line with the other independent claims discussed above.

Minor objections to the claims:

In claim **79**, on line 13, the phrase “said data” should be “said embedded data” in order to correspond to the “embedded data” claimed earlier. Also, on line 14, the word “said” is needed before “processor interrupt signal” in order to correspond to the “processor interrupt signal” claimed earlier.

In claim **80**, on line 11, the phrase “said data” should be “said embedded data” in order to correspond to the “embedded data” claimed earlier.

In claim **81**, on line 8, the word “enable” should be “enables”.

In claim **82**, on line 9, the word “enable” should be “enables”.

Claim **113** currently depends on claim **112** which is canceled.

Claim **227** currently depends on claim **226** which is canceled.

In claim **244**, on line 6, the word “with” should be “which”. Also, on line 10, I have some confusion with the language “operates at said receiver station to output said memory”. Maybe there are some words missing here?

In claim **288**, on lines 1 and 2, the word “comprises” is missing after the word “program”?

In claim **292**, on line 8, the word “a” is missing before the word “first”.

In claim **361**, on line 2, there appears to be some punctuation missing after the word “stations”.

In claim **376**, on line 8, the word “signal” should be “signals”.

In claim **404**, on line 2, the word “station” should be “stations”. Also, on line 4, the word “comprises” should be “comprising”. Also, on line 6, there appears to be some punctuation missing after the word “transmitter”. Also, on line 9, the word “receivers” should be “receiver”.

